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Please replace pending claim 4 with the following claim 4:

4. (once amended) The method of claim 1, further comprising contacting the organ, tissue or cells with a growth factor or cytokine.

Please replace pending claim 6 with the following claim 6:

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6. (once amended) The method of claim 4, wherein said growth factor or cytokine is b-FGF, PDGF, TNF-α, IL-1, IL-6 or VEGF.

Please replace pending claim 8 with the following claim 8:

8. (once amended) The method of claim 1, wherein the TGFβ1 is a derivative or functionally equivalent substance.

Please replace pending claim 9 with the following claim 9:

9. (once amended) The method of claim 8, wherein said derivative or functionally equivalent substance is an antibody, (poly)peptide, nucleic acid, small organic compound, ligand, hormone, PNA or peptidomimetic.

Please replace pending claim 10 with the following claim 10:

10. (once amended) The method of claim 1, wherein said method is applied to a subject suffering from a vascular disease or a cardiac infarct or a stroke.

Please replace pending claim 11 with the following claim 11:

11. (once amended) The method of claim 10, wherein said vascular disease is arteriosclerosis and/or a hyperlipidemic condition, a coronary artery disease, cerebral occlusive disease, peripheral occlusive disease, visceral occlusive disease, renal artery disease, mesenterial arterial insufficiency or an ophthalmic or retinal occlusion.

Please replace pending claim 12 with the following claim 12:

12. (once amended) The method of claim 1, wherein said method is applied to a subject during or after exposure to an agent or radiation or surgical treatment which damage or destroy arteries.

Please replace pending claim 13 with the following claim 13:

13. (once amended) A method for the treatment of tumors comprising contacting an organ, tissue or cells with an agent which suppresses arteriogenesis and/or the growth of collateral arteries and/or other arteries from preexisting arteriolar connections through inhibition of the biological activity of TGFβ1.

Please replace pending claim 15 with the following claim 15:

15. (once amended) The method of claim 13, wherein the agent inhibits the biological activity of TGFβ1 and/or inhibits an intracellular signal or signal cascade comprising SMAD proteins triggered in macrophages through the receptor for TGFβ1.

Please replace pending claim 16 with the following claim 16:

16. (once amended) The method of claim 15, wherein the agent blocks an interaction of the TGFβ1 and its receptor.

Please replace pending claim 17 with the following claim 17:

17. (once amended) The method of claim 13, wherein the agent is derived from a class of substances selected from the group consisting of: an antibody, (poly)peptide, nucleic acid, small organic compound, ligand, hormone, PNA and peptidomimetic.

Please replace pending claim 18 with the following claim 18:

18. (once amended) The method of claim 17, wherein the agent is expressed in vascular cells or cells surrounding preexisting arteriolar connections to a tumor.

Please replace pending claim 19 with the following claim 19:

19. (once amended) The method of claim 18, wherein the tumor is a vascular tumor.

Please replace pending claim 20 with the following claim 20:

20. (once amended) The method of claim 19, wherein the tumor is selected form the group consisting of: Colon Carcinoma, Sarcoma, Carcinoma in the breast, Carcinoma in the head/neck, Mesothelioma, Glioblastoma, Lymphoma and Meningeoma.

Please add the following new claims:

22. (new) A method for enhancing arteriogenesis and/or the growth of collateral arteries and/or other arteries from preexisting arteriolar connections comprising:

(a) obtaining cells, tissue or an organ from a subject;

(b) introducing a nucleic acid molecule encoding and capable of expressing TGFβ1 *in vivo* into said cells, tissue or organ; and

(c) reintroducing the cells, tissue or organ obtained in (b) into the same subject or a different subject.

23. (new) The method of claim 22, wherein the nucleic acid molecule is reintroduced by intracoronary, intramuscular, intraarterial, intravenous, intraperitoneal or subcutaneous route.